

AMENDMENTS TO CLAIMS

1. -11. (Cancelled).

12. (Currently Amended) An equipment diagnostic system comprising[[]]:

a power distribution panel switch gear arranged near a plurality of devices to be operated, said power distribution panel switch gear comprising a panel having metal and non-metal surfaces;

a communication module, arranged in the power distribution panel switch gear, for receiving and transmitting instructions to said plurality of devices using wireless communication in an evanescent mode;

a controller, arranged in a central control room, for transmitting instructions [[from which commands relating to the operation and monitoring of said plurality of device to be operated are output]] to said power distribution panel switch gear [[and the output commands are used to communicate with said power distribution panel switch gear]] through wireless communication;

a receiver for receiving wireless communication waves, in an evanescent mode, emanating from said power distribution panel switch gear [[present in a portion of the in-panel space of aid power distribution panel switch gear, or at the boundary section between the power distribution panel switch gear and the external space thereof, or in the vicinity of the power distribution panel switch gear]], and

a diagnostic judgment device for diagnosing whether information content of the [[control and monitoring signals of the]] wireless communication waves [[which have been]] received by said receiver is [[are]] within an operating range acknowledged to be a normal operating range.

13. (Currently Amended) The equipment diagnostic system according to Claim 12, wherein said diagnostic judgment device detects precursory indications of abnormality or deterioration by analyzing the [[operation and monitoring signals]] information content of the wireless communication waves existing under [[the]] normal operating conditions of said power distribution panel switch gear, and judges [[judging]] whether [[the response relationship between signals and the]] amounts of change of the information content of the wireless communication waves [[thereof with the elapse of time]] have deviated from a normal range.

14. (Currently Amended) The equipment diagnostic system according to Claim 12, wherein said diagnostic judgment device has a transmitter which can transmit test [[-use]] wireless signals in a single frequency band, in addition to the wireless communication wave signals, used inside [[in the in-panel space of]] said power distribution panel switch gear under the normal operating conditions thereof.

15. (Currently Amended) The equipment diagnostic system according to Claim 12, wherein said diagnostic judgment device has a transmitter which can transmit test [[-use]] wireless signals in a non-single frequency band, in addition to the wireless wave communication signals, used inside [[in the in-panel space of]] said power distribution panel switch gear under the normal operating conditions thereof.

16. (Currently Amended) The equipment diagnostic system according to Claim 12, wherein [[said diagnostic judgment device is such that when said power distribution panel switch gear is a metal-enclosed power distribution panel, the metallic plate]] the metal surfaces in any section of the power distribution panel switch gear [[is made of]] comprise a material which enables [[the]] penetration of [[in-panel]] the wireless communication waves.

17. (Currently Amended) The equipment diagnostic system according to Claim 12, wherein, after information has been [[acquired]] received from said power distribution panel switch gear, said diagnostic judgment device stores the information

into a database and outputs the information [[to a plant operation undertaker]] according to [[the]] a value-judging market price indicating [[the]] a degree of usefulness of the [[corresponding]] information.